Organic Analysis
Base/Neutral/Acid Extractables
Request Sheet

Organic parameters are grouped by methodologies and program lists. The compounds regulated under the Sate Drinking Water Act are listed on a separate request sheet due to the extensive lists and numerous methodologies involved. Use the Other space on the Organics Analysis Request Sheet for parameters not listed.

Routine Semivolatiles, Pesticides, and PCBs

The following groups are compounds typically requested by the water programs and Solid/Hazardous Management. These compounds are found in the National Pollution Discharge Elimination System (NPDES) list and are the extractables that have always been on the request sheets.

- **NPDES Extractables**
- **Pesticides/PCBs**

To collect for these extractables:

Water: One 1-gallon amber bottle, EPA certified clean, and teflon-lined cap.
Holding time – 7 days to extract; 40 days to analyze

Sediment: One 16-ounce amber jar, EPA certified clean, and teflon-lined lid.
Holding time – 14 days

TCL (Target Compound List), Semivolatiles, and Pesticides/PCBs

The following groups of compounds are typically requested by the Superfund programs.

- **TCL Semivolatiles**
- **Pesticides/PCBs**

To collect for these extractables:

Water: One 1-gallon amber bottle, EPA certified clean, and teflon-lined cap.
Holding time – 7 days to extract; 40 days to analyze

Sediment: One 16-ounce amber jar, EPA certified clean, and teflon-lined lid.

Nitrobodies

These 6 compounds are requested at various Superfund sites where explosives are suspected.
To collect for these samples:

Water: Two 1-liter amber bottles, EPA certified clean, and teflon-lined cap.

Toxicity Characteristic Leaching Procedure (TCLP) Extractables

These are the 22 compounds regulated by the toxicity characteristic rule. To request all the organics regulated by the rule you will also need to ask for the TCLP volatiles listed on the Volatiles and Petroleum Hydrocarbon Request Sheet. To collect the TCLP extractables:

Routine soil or sediment sample: One 16-ounce amber jar with teflon-lined lid.

Lightweight sample, such as ash, or sample with a high moisture content: At least two 16-ounce jars are needed. If you have questions about the sample matrix or amounts, call the laboratory to consult about the number to collect or collect extra jars to be sure there is enough sample to perform the test.

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PROJECT/SITE NO.	PROJECT NAME
STATION NUMBER	COUNTY
DESCRIPTION	
STREAM MILE	DEPTH MATRIX
COLLECTED: DATE	TIME
SAMPLER'S NAME(printed)	
SAMPLING AGENCY	BILLING CODE
IF PRIORITY, DATE NEEDED	
SEND REPORT TO:	
CONTACT HAZARD	

Organic Analysis
Base/Neutral/Acid Extractables

Laboratory Number

Branch Lab Number

Chain of Custody and Supplemental Information

Only one chain of custody form is required per sample set or point (if all collected at the same time)

1. Collected by
   Date Time
   Delivered to
   Date Time
2. Received by
   Date Time
   Delivered to
   Date Time
3. Received by
   Date Time
   Delivered to
   Date Time
4. Received in Lab by
   Date Time
   Logged in by
   Date Time

Additional Information

1. Approximate volume of sample
2. Nearest town or city
3. Others present at collection
4. Number of other samples collected at same time at this point
5. Field collection procedure, handling and/or preservation of this sample
6. Mode of transportation to lab
7. Sample sealed by
8. Date sample sealed
9. Remarks

*	NPDES Extractables
	butylbenzylphthalate
	bis(2-ethylhexyl)phthalate
	di-n-butylphthalate
	di-n-octylphthalate
	diethylphthalate
	dimethylphthalate
	n-nitrosodimethylamine
	n-nitrosodiphenylamine
	n-nitrosodi-n-propylamine
	isophorone
	nitrobenzene
	2,4-dinitrotoluene
	acenaphthene
	acenaphthylene
	anthracene
	benzo(a)anthracene
	benzo(a)pyrene
	benzo(b)fluoranthene
	benzo(g,h,i)perylene
	benzo(k)fluoranthene
	chrysene
	dibenzo(a,h)anthracene
	fluoranthene
	fluorene
	indeno(1,2,3-c,d)pyrene
	naphthalene
	phenanthrene
	pyrene
	bis(2-chloroethyl)ether
	bis(2-chloroethoxy)methane
	bis(2-chloroisopropyl)ether
	4-bromophenylphenylether
	4-chlorophenylphenylether
	hexachlorocyclopentadiene
	hexachlorobutadiene
	hexachlorobenzene
	hexachloroethane
	1,2,4-trichlorobenzene
	2-chloronaphthalene
	4-chloro-3-methyl phenol

*	NPDES Extractables(con't)
	2-chlorophenol
	2,4-dichlorophenol
	2,4-dimethylphenol
	2,4-dinitrophenol
	4,6-dinitro-o-cresol
	2-nitrophenol
	4-nitrophenol
	pentachlorophenol
	phenol
	2,4,6-trichlorophenol

*	TAL Semivolatiles
	acenaphthene
	acenaphthylene
	anthracene
	benzo(a)anthracene
	benzo(a)pyrene
	benzo(b)fluoranthene
	benzo(g,h,i)perylene
	benzo(k)fluoranthene
	benzoic acid
	benzyl alcohol
	bis(2-chloroethoxy)methane
	bis(2-chloroethyl) ether
	bis(2-chloroisopropyl)ether
	bis(2-ethylhexyl)phthalate
	4-bromophenylphenylether
	butylbenzylphthalate
	4-chloroaniline
	4-chloro-3-methyl phenol
	2-chloronaphthalene
	4-chlorophenylphenylether
	chrysene
	di-n-butylphthalate
	di-n-octylphthalate
	dibenzo(a,h)anthracene
	dibenzofuran
	3,3'-dichlorobenzidine
	2,4-dichlorophenol
	diethylphthalate
	2,4 dimethylphenol

*	TAL Semivolatiles
	dimethylphthalate
	4,6-dinitro-2-methylphenol
	2,4-dinitrophenol
	2,4-dinitrotoluene
	2,6 dinitrotoluene
	fluoranthene
	fluorene
	hexachlorobenzene
	hexachlorobutadiene
	hexachlorocyclopentadiene
	hexachloroethane
	indeno(1,2,3-cd)pyrene
	isophorone
	2 methylnaphthalene
	2-methylphenol
	4-methylphenol
	n-nitrosodiphenylamine
	n-nitroso-n-dipropylamine
	naphthalene
	2-nitroaniline
	3-nitroaniline
	4-nitroaniline
	nitrobenzene
	2-nitrophenol
	4-nitrophenol
	pentachlorophenol
	phenanthrene
	phenol
	pyrene
	1,2,4-trichlorobenzene
	2,4,5-trichlorophenol
	2,4,6-trichlorophenol

*	Nitrobodies
	RDX
	2,4,6-TNT
	2,4-dinitrotoluene
	2,6-dinitrotoluene
	nitrobenzene
	1,3,5-TNB

*	TCLP Semivolatiles
	chlordane
	o-cresol
	m-cresol
	p-cresol
	cresol
	2,4-D
	2,4-dinitrotoluene
	endrin
	heptachlor
	heptachlor epoxide
	hexachlorobenzene
	hexachlorobutadiene
	hexachloroethane
	lindane
	methoxychlor
	nitrobenzene
	pentachlorophenol
	pyridine
	toxaphene
	2,4,5-trichlorophenol
	2,4,6-trichlorophenol
	2,4,5-TP (Silvex)

*	Pesticides/PCBs
	aldrin
	alpha-BHC
	beta BHC
	delta-BHC
	gamma-BHC (lindane)
	technical chlordane
	alpha-chlordane
	gamma-chlordane
	4,4'-DDD
	4,4'-DDE
	4,4'-DDT
	dieldrin
	endosulfan I
	endosulfan II
	endosulfan sulfate
	endrin
	endrin aldehyde
	endrin ketone
	heptachlor
	heptachlor epoxide
	toxaphene
	methoxychlor
	PCB 1016/1242
	PCB 1221
	PCB 1232
	PCB 1248
	PCB 1254
	PCB 1260
	PCB 1262

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Organic Analysis
Volatiles and Petroleum Hydrocarbons
Request Sheet

Organic parameters are grouped by methodologies and program lists. The compounds regulated under the Safe Drinking Water Act are listed on a separate request sheet due to the extensive lists and numerous methodologies involved. Use the Other space for parameters not listed.

National Pollution Discharge Elimination System (NPDES) Volatiles

These compounds are routine volatile parameters and are typically requested by the water programs and Solid/Hazardous Waste Management. These compounds are the volatiles that have always been on the sample request sheet. To collect for these volatiles:

Water: Four 40-ml amber vials, teflon-lined septa caps, **no headspace**.
Holding time – 14 days.

Sediment: One 4-ounce amber jar, teflon-lined septa cap.
Holding time – 14 days.

TCL (Target Compound List) Volatiles - 8260A

These are the Target Compound List (TCL) volatile parameters. These are the compounds typically requested by the Superfund programs. To collect for these volatiles:

Water: Four 40-ml amber vials, teflon-lined septa caps, **no headspace**.
Holding time – 14 days.

Low-level sediment: One 4-ounce amber jar, teflon-lined septa cap + 3 EnCore sampling devices. **EnCore devices must be received in the Central Laboratory within 24 hours of collection in order to be preserved**. Once preserved, the holding time is 14 days.

High-level sediment or waste: One 4-ounce amber jar, teflon-lined septa cap.

Toxicity Characteristic Leaching Procedure (TCLP) Volatiles

These are the 10 compounds regulated by the toxicity characteristic rule. To request all the organics regulated by the rule, you will also need to ask for the TCLP extractables listed on the Base/Neutral/Acid Extractables Request Sheet. To collect the TCLP volatiles:

Routine soil or sediment sample: One 4-ounce amber jar, teflon-lined septa cap.

Lightweight sample, such as ash, or sample with a high moisture content: At least two 16-ounce jars are needed. If you have questions about the sample matrix or amounts, call the laboratory or collect extra jars so we can perform the test.

Petroleum Analyses

The following groups of compounds are typically requested by the Underground Storage Tank Division.

- **BTEX - 8260A - UST** are individual compounds found in many petroleum products.
- **TPH by GC** are gas chromatography methods for total petroleum hydrocarbons. These analyses are gasoline range organics **(GRO)** and extractable petroleum hydrocarbons (EPH).

Samples for these procedures are collected as follows;

Water: BTEX and GRO - Five 40-ml amber vials, teflon-lined septa cap, **no headspace**.
EPH - Two 1-liter amber bottles, acid-preserved.

Note: EPH may be collected in a 1-gallon amber bottle, acid preserved.

Sediment: BTEX and GRO - One 4-ounce amber jar, teflon-lined septa cap.
EPH - One 16-ounce amber jar, teflon-lined cap.

State of Tennessee - Environmental Laboratories

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Organic Analysis

Volatiles and Petroleum Hydrocarbons

PROJECT/SITE NO.	PROJECT NAME
STATION NUMBER	COUNTY
DESCRIPTION	
STREAM MILE	DEPTH / MATRIX
COLLECTED: DATE	TIME
SAMPLER'S NAME(printed)	
SAMPLING AGENCY	BILLING CODE
IF PRIORITY, DATE NEEDED	
SEND REPORT TO:	
CONTACT HAZARD	

*	NPDES Volatiles - 624	*	TCL Volatiles - 8260A	*	TCLP Volatiles
	Bromoform		Chloromethane		Benzene
	Bromodichloromethane		Bromomethane		Carbon tetrachloride
	Carbon Tetrachloride		Vinyl chloride		Chlorobenzene
	Chlorobenzene		Chloroethane		Chloroform
	Chloroethane		Methylene chloride		1,2-Dichloroethane
	2-Chloroethylvinyl ether		Acetone		1,1-Dichloroethane
	Chloroform		Carbon disulfide		Methyl ethyl ketone
	Chloromethane		1,1-Dichloroethene		Tetrachloroethene
	Dibromochloromethane		1,1-Dichloroethane		Trichloroethene
	1,2-Dichlorobenzene		Cis-1,2-dichloroethene		Vinyl chloride
	1,3-Dichlorobenzene		Trans-1,2-dichloroethene	*	BTEX - 8260A - UST
	1,4-Dichlorobenzene		1,2-Dichloroethane		Benzene
	Dichlorodifluoromethane		Chloroform		Toluene
	1,1-Dichloroethane		2-Butanone		Ethyl benzene
	1,2-Dichloroethane		1,1,1-Trichloroethane		o-Xylene
	1,1-Dichloroethene		Carbon tetrachloride		m-Xylene
	Cis-1,2-dichloroethene		Vinyl acetate		p-Xylene
	Trans-1,2-dichloroethene		Bromodichloromethane		Methyl t-butyl ether
	1,2-Dichloropropane		1,2-Dichloropropane		Diisopropyl ether
	Cis-1,3-dichloropropene		Cis-1,3-dichloropropene	*	TPH by GC
	Trans-1,2-dichloroethene		Trichloroethene		Gasoline Range Organics
	Methylene chloride		Dibromochloromethane		Diesel Range Organics
	1,1,2,2-Tetrachloroethane		1,1,2-Trichloroethane		Oil Range Organics
	Tetrachloroethene		Benzene	*	Other
	1,1,1-Trichloroethane		Trans-1,3-dichloropropene		
	1,1,2-Trichloroethane		Bromoform		
	Trichloroethene		4-Methyl-2-pentanone		
	Trichlorofluoromethane		2-Hexanone		
	Vinyl chloride		Tetrachloroethene		
	Benzene		Toluene		
	Ethylbenzene		1,1,2,2-Tetrachloroethane		
	Toluene		Chlorobenzene		
	o-Xylene		Ethyl benzene		
	m-Xylene		Styrene		
	p-Xylene		o-Xylene		
			m-Xylene		
			p-Xylene		

Laboratory Number

Chain of Custody and Supplemental Information

Only one chain of custody form is required per sample set or point (if all collected at the same time)

1. Collected by
   - Date / Time
   - Delivered to
   - Date / Time
2. Received by
   - Date / Time
   - Delivered to
   - Date / Time
3. Received by
   - Date / Time
   - Delivered to
   - Date / Time
4. Received in Lab by
   - Date / Time
   - Logged in by
   - Date / Time

Additional Information

1. Approximate volume of sample
2. Nearest town or city
3. Others present at collection
4. Number of other samples collected at same time at this point
5. Field collection procedure, handling and/or preservation of this sample
6. Mode of transportation to lab
7. Sample sealed by
8. Date sample sealed
9. Remarks

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